

INTRODUCTION TO THE SPECIAL ISSUE ON LONG-TERM CARE INSURANCE AND HEALTH INSURANCE

The articles published in this special issue cover several dimensions of two insurance markets that are characterized by major imperfections such as high transaction costs, information asymmetries, and low competition. Furthermore, insurance premiums are high and coverage is limited. On the international scale, the supply of both private long-term care insurance and health insurance is limited, whereas populations are aging.

According to Jeffrey Brown and Amy Finkelstein, there are important demand- and supply-side limits to the size of the U.S. private long-term care insurance market, and it is not clear how public policies could improve the situation in the short run. They document that only 4 percent of long-term care expenditures are reimbursed by private insurance policies.

Brown and Finkelstein estimate that premiums in this market are very high relative to benefits that policies provide. For example, they estimate that, on average, the typical policy purchased by an average 65-year-old (about the average age of buyers) and held until death has a load of 18 cents; in other words, the typical policy will pay, on average, only 82 cents in expected present discounted value of benefits for every dollar paid in the expected present discounted value of premiums. Once they take into account that individuals often stop paying premiums at some point after purchase, the estimated load rises considerably from 18 cents on the dollar to 51 cents on the dollar. These high loads can reflect asymmetric information, limited competition, and/or high administrative costs.

High premiums can also be linked to expensive benefits. Two factors may explain why average claims are high in the United States (Kessler, 2008). The insurance payment structure reimburses assistance costs using complicated cost-plus contracts instead of simple fixed-sum payments where clients (or their agents) can manage the assistance budget, as they do in France or Spain (Guillen and Pinquet, 2008). Moreover, this form of assistance cost reimbursement is subject to *ex post* moral hazard from the beneficiaries and service providers. This potential form of moral hazard (Picard, 2000; Dionne, Giuliano, and Picard, 2009) supplements the adverse selection and *ex ante* moral hazard already documented in this market by Finkelstein and McGarry (2006). Cost control expenses should then be very high in this market, which is another source of high premiums. These supply-side problems may contribute to the limited size of the private market.

Brown and Finkelstein also present numerous demand-side factors that may explain the small size of the private insurance market even in the presence of a potentially high-risk situation for the decision makers: limited consumer knowledge, state-dependent preferences, and potential substitutes for private formal insurance such as Medicaid (Pauly, 1990; Brown and Finkelstein, 2008) or even the use of home equity to finance long-term care expenditures (Davidoff, 2008).

In this issue, Thomas Davidoff shows that if consumers typically liquidate home equity only in the event of illness or very old age, long-term care insurance and annuities become less attractive and may become substitutes rather than complements. The reason for this is that the marginal utility of wealth drops when an otherwise illiquid home is sold, an event correlated with the payouts of both financial products. He concludes that extending the market for home equity products may contribute to expanding the market for long-term care insurance. These results were obtained without a bequest motive and with state-dependent preferences. Complementarity between annuities and long-term insurance should be weaker if a bequest motive exists (Pauly, 1990). Asymmetric information can also affect the relationship between annuities and long-term care insurance.

David Webb examines the markets for long-term care insurance and annuities when there is asymmetric information and costs of administering contracts. Individuals differ in terms of their risk aversion. He shows that in the presence of administration costs, individuals that are more risk averse may buy relatively more long-term care insurance and more annuity coverage. This result is consistent with empirical research. Under the same assumptions, he also shows that equilibrium exists with bundled contracts that Pareto dominate the outcomes with stand-alone contracts, and it is robust to competition from stand-alone contracts. Why, then, do we observe that bundled contracts represent a small share of the voluntary annuity market? Other explanations must be investigated.

Michael McShane and Larry Cox offer an empirical analysis of issuance decisions of long-term care insurance. They first show that private long-term care insurance remains a relatively minor financing vehicle for long-term care, as documented above. They then argue that a better understanding of decisions to underwrite private long-term insurance should be of interest to many participants in this market. Some life-health insurers have recently entered this relatively new and risky line of business. Are they motivated by strategic focus or diversification? The authors investigate empirically what differentiates these insurers and whether managers are following a diversification or strategic focus approach. They find that strategic focus is a consistently important factor and that managers' participation and volume decisions are made independently.

H. J. Smoluk proposes an empirical framework for linking long-term disability claim rates to the macro-economy using the consumption-to-wealth ratio. The model is developed from financial economic and option theories. Financial economic theory suggests that the consumption-to-wealth ratio reflects consumption smoothing and reveals expectations about future wealth. For individuals contemplating submitting a long-term disability claim, the expected payoff for exercising this option is a function of expectations of future wealth. The lower the expectations of future wealth, the

higher the expected payoff, and the higher claims rates are likely to be. They find that long-term disability claims rates and the consumption-to-wealth ratio are negatively linked in a long-run equilibrium.

The remainder of the special issue focuses on health insurance. Francis Ahking, Carmelo Giaccotto, and Rexford Santerre analyze the aggregate demand for private health insurance coverage in the United States using an error correction model with data from 1966 to 1999. Short- and long-run price and income elasticities of demand are estimated. Their results indicate that both private insurance enrollment and the completeness of insurance are relatively inelastic with respect to changes in price and income in the short and long run. Their results suggest that an increase in the number of cyclically and frictionally uninsured generates less welfare loss than an increase in the number of structurally uninsured.

In theory, capitation gives insurers incentives to set their offerings to attract healthy clients and deter those who are sick. Karen Eggleston and Anupa Bir evaluate the incentives for such service-specific quality offerings using managed care medical and pharmacy spending data from the Massachusetts State Employee Insurance Program. Services most vulnerable to stinting are cardiac care, diabetes care, and mental health and substance abuse treatment. Empirically, the financial temptation to distort service quality increases with supply-side cost sharing. Their empirical results highlight how selection incentives work at cross-purposes with efforts to reward excellent chronic disease management.

Michel Mougeot and Florence Naegelen analyze the rationale for introducing outlier payments into a prospective payment system for hospitals under adverse selection and moral hazard. The payer has only two instruments: a fixed price for patients whose treatment cost is below a threshold and a cost-sharing rule for outlier patients. They show that a fixed-price policy is optimal when the hospital is sufficiently benevolent. When the hospital is weakly benevolent, a mixed policy solving a trade-off between rent extraction, efficiency, and dumping deterrence is preferred. They demonstrate how an optimal combination of fixed price and partially cost-based payment depends on the degree of benevolence of the hospital, the social cost of public funds, and the distribution of patient severity.

Whereas the literature evaluating the effect of tort reforms has tended to focus on the impact of reforms on insurers' reported incurred losses, Patricia Born, W. Kip Viscusi, and Tom Baker examine the effects of tort reforms on insurers' ultimate losses using the losses from a comprehensive sample of insurers writing medical malpractice insurance from 1984 to 2003. Noneconomic damages caps are particularly influential in reducing medical malpractice losses and increasing insurer profitability. They find that the long-run effects of the studied reforms are greater than insurers' expected effects: 5- and 7-year developed loss ratios are below the initially reported incurred loss ratios for those years following the enactment of noneconomic damages caps. The regressions show that reforms have the greatest effects on firms that are at the high end of the loss distribution.

Has the market for medical malpractice insurance changed in recent years? There is disagreement on this question and on the causes of such a change. Faith Neale, Kevin Eastman, and Pamela Peterson Drake examine factors that affect this insurance

market, including the growth in premiums, losses, investment earnings, and loss variability. Their analysis shows that there was significant deterioration in the market for medical malpractice insurance beginning in 1998 and culminating in 2001. They conclude that insurers' losses are the primary driver of the market deterioration.

I hope these articles will shed light on factors explaining the imperfections in these two markets and will lead to enhanced resource allocation. Sincere thanks to the authors and referees for their valuable contribution to this issue. I also thank Jeffrey Brown, Amy Finkelstein, and Jean Pinquet for their comments.

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